Solicitation and Review Process

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ATR
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FY09 Solicitation Process

There were two calls for proposals:

Winter 2008

- Winter 2008 submission window opened 8/25/08
- Last day to submit proposals 11/3/08
- Announcement of awards 2/04/09

Summer 2009

- Summer 2009 submission window opened 11/10/08
- Last day to submit proposals 6/04/09
- Announcement of awards ~ 8/04/09

Results of Winter Solicitation

Received 13 proposals

- 11 Irradiation experiments
- 2 Post Irradiation Examination (PIE) only experiments

All proposals reviewed for feasibility in both ATR and MIT Reactors

Each proposal received 3 external technical reviews. Proposals scored for scientific merit, proposed research plan, resources, and team qualifications

Each proposal reviewed for programmatic relevance by INL program managers and DOE-HQ

Proposals, scored technical reviews, program review grades all provided to panel committee

Results of Winter Solicitation cont.

Committee met January 15th and performed a thorough review of both the proposals and the technical reviews. In only two instances did they adjust an individual reviewer's score

In one instance this changed the ranking of a proposal upward, but not enough to change the projects selected for award

Results of Winter Solicitation cont.

Four new projects selected

3 irradiation (one for the MIT reactor)

1 PIE only

Awards announced February 4, 2009

- Massachusetts Institute of Technology
- University of California, Santa Barbara
- University of Wisconsin
- Utah State University

Fall/Winter 2010 Solicitation: What's New

Training experiment – multiple universities participate in a capsule experiment to provide maximum benefit to as many researchers as possible

New capabilities available from the four new partner facilities including additional reactors, ion beams, characterization laboratories, and a variety of instruments. Relevant proposals will be reviewed by the partner facilities for feasibility

Argonne National Laboratory's Advanced Photon Source

Partnership Proposals

Partnership proposals received all year and reviewed as they are received

MIT's reactor was the first partner facility to join ATR NSUF

To date in FY09 four Partnership Proposals received, and all four institutions have been accepted as partners.

Partnership Proposals – cont.

Review committee consists of three independent reviewers; two external, and one INL reviewer. All proposals reviewed for specific criteria including:

- Does the proposed facility add a capability not currently available at the INL
- Does the proposed facility add a capability current available at the INL, but likely to be oversubscribed
- Does the proposed partnership facility have a capability that would support he ATR NSUF mission to advance nuclear technology
- Does the proposing institution appear to be technically capable of supporting ATR NSUF experiments

Comments for the rationale are also provided.

Once reviews are received, the Scientific Program Manager for the ATR NSUF performs a final review and decision.

Partner Institutions

University of Michigan – Ion Beam Laboratory and Irradiated Materials Complex

University of Wisconsin – Characterization Laboratory for Irradiated Materials (includes Accelerator Ion Beam and Electron Microscopy Laboratory)

University of Nevada, Las Vegas – Radiochemistry Laboratory, Metallographic Microscope, X-Ray Powder Diffraction, Rietveld Analysis, Scanning Electron Microscopy, Electron Probe Micro-Analyzer (EPMA), Analytical Transmission Electron Microscopy (TEM), X-Ray Fluorescence (XRF), PANalytical Axios Sequential Wavelength-dispersive X-ray Fluorescence Spectrometer

North Carolina State University – Pulstar reactor

Conclusions

FY09 solicitation process ran smoothly and resulted in award of the best science from the proposals received.

A rolling call offers users the opportunity to propose at their convenience and gives the ATR NSUF two opportunities to review research needs based on facility availability

Partnership program is of interest to the university community and will allow for award of more research to help DOE accomplish its goal of revitalizing nuclear research capability in the U.S.